SUBJECT INDEX TO VOLUME 44

(abs) = abstract (E) = editorial

Abdomen, auxiliary methods and drugs in diagnosis of pathological conditions of (abs), 800
calcification in neuroblastoma in, 175
problems in differential diagnosis between urologic lesions and lesions of (abs), 796
Abdominal aortic aneurysm, ruptured, diagnosis of (abs), 154
Abscess, gas, of pancreas, 485
perinephric, 71
pulmonary, 530
Abscesses, apparently healed lung, bronchographic study of (abs), 152
Accessory stomach in right thorax (abs), 154
Acetabulum, adolescent deformities of (abs), 158
Acromegaly, vertebral column in, 552
Adenomata, pituitary, follow-up study of surgical results in 338 cases (abs), 148
Adolescent deformities of acetabulum (abs), 158
development of sella turcica and frontal sinus based on consecutive roentgenograms, 665
Adrenal glands, cortical and medullary tumors of, modified air injection roentgen technique for demonstrating (abs), 933
main indication for radiation treatment of (abs), 479
Agar jelly in roentgen examination of stomach, 459
Alimentary tract, results of protracted fractional roentgen irradiation of carcinoma of (abs), 315
Alpha rays, biological effect of, in problem of weak radium therapy (abs), 318
deep therapy with (abs), 801
American College of Radiology, new officers, 301
professional bureau of, 294
American Radium Society, 913
report of Research and Standardization Committee of, 909
report of annual meeting, 138
American Registry of X-Ray Technicians, placement bureau of, 300
American Roentgen Ray Society, annual meeting (E), 450, (E), 763
annual meeting, commercial exhibit, 777
annual meeting, committees on local arrangements, 296
annual meeting, golf tournament, 296
annual meeting, ladies program, 297
annual meeting, officers elected, 913
annual meeting, preliminary program, 129
annual meeting, scientific exhibit, 771
Amniotic fluid, aspiration of, by fetus (abs), 644
Anatomy, roentgen, of extrahepatic bile tracts (abs), 643
roentgen, of sulci and vessel channels of skull (abs), 782
Aneurysm, cirsoid venous, roentgen demonstration of (abs), 795
ruptured abdominal aortic, diagnosis of (abs), 154
Aneurysms, spontaneous arteriovenous, of thorax (abs), 151
syphilitic aortic, cor pulmonale due to obstruction of pulmonary artery by (abs), 151
Anomalies of development of limbs, roentgen iconography of (abs), 938
of development of lower limbs, iconography of (abs), 794
of vertebral column, persistence of notochord, 719
Anus, carcinoma of, incidence, pathology and radiation treatment, 265
Aorta, dextroposition of arch of (abs), 784
Arteriosclerotic dysbasia, intermittent, functional radiation therapy of (abs), 160
Articular processes of vertebrae, primary pyogenic osteomyelitis of (abs), 470
Ascaridiasis, roentgen examination in (abs), 787
roentgen picture in (abs), 466
Atelectasis, massive, spontaneous pneumothorax associated with (abs), 152
Auricle, enlarged left, roentgen appearance of, in patients with mitral disease, 834

Barite pneumoconiosis, study of (abs), 464
Basedow's disease; See: Exophthalmic goiter
Besnier-Boeck's disease of lungs, course of, in serial roentgenograms, 564
Bile calculus, occlusion of duodenum by (abs), 788
tracts, extrahepatic, roentgen anatomy of (abs), 643
Biological action of ionizing radiations, some aspects of, 649
Bladder, carcinoma, results of supervoltage roentgen therapy in, 586
inoperable cancer, effect of fractional roentgen irradiation on, 401
Blood, correlation of roentgen and blood examinations in multiple myeloma, 858
stream, rate of removal of thorium dioxide from (abs), 320
vessels, of skull, roentgen anatomy of channels (abs), 782
Body, entire, treatment of polycythemia by irradiation of (abs), 310
section roentgenography, practical applications of, 24
Bone and joint complications in Malta fever (abs), 474
benign giant cell tumor of, five year cure, 884

changes associated with lymphogranuloma venereum (abs), 157
changes in leukemia, 31
circulatory changes in, 90
marrow, effect of roentgen rays on, in vivo and in vitro (abs), 319
marrow of white mouse, effect of single roentgen dose on (abs), 323
metastases from carcinoma of prostate, 732
metastases from primary carcinoma of lung (abs), 469
metastases in genital carcinoma of female (abs), 469
metastases of sarcomata, roentgen study (abs), 469
metastases, squamous cell epithelioma of cervix uteri with, 579
BONES, action of roentgen rays on (abs), 319
of neck, small accessory, 714
BOOK REVIEWS
A Bibliography of the Writings of Harvey Cushing. By the Harvey Cushing Society, 142
Endocrine Gynecology, By E. C. Hamblen, 143
The Electrocardiogram and X-Ray Configuration of the Heart. By Arthur M. Master, 144
La roentgenchimografia cardio-vascolare. By Pietro Perona, 144
A Manual of Roentgen Diagnosis. By Kenneth S. Davis, 144
Radiodiagnostico. Tomo I and II. By Gonzalo Esguerra Gomez, 145
Grundlagen der Röntgendiagnostik und Röntgentherapie. By G. Schulte and F. Kuhlmann, 145
Ergebnisse der physikalisch-diätetischen Therapie. By W. Heupke, J. Kowarschik and J. Kühnau, 145
Radiologie clinique du coeur et des gros vaisseaux. By Ch. Laubry, P. Cottenot, D. Routier and R. Heim de Balsac, 635
Gastrointestinal Dysfunction. By Barton Arthur Rhinehart, 635
The Hospital Care of Neurosurgical Patients. By Wallace B. Hamby, 636
A Topographic Atlas for X-Ray Therapy. By Ira I. Kaplan and Sidney Rubenfeld, 636
Traité d'électro-radiothérapie. L. Delherm and L. Laquerrière, Editors, 636
Das Wesen und der Wert der Tomographie. By W. Deutschmann, 637
The Medical Career, and Other Papers. By Harvey Cushing, 914
Handbook of the Hospital Corps, United States Navy, 1939, 915
Fourth Saranac Laboratory Symposium on Silicosis. Edited by B. E. Kuechle, 916
Anatomy of the Human Lymphatic System. By H. Rouvière. Translated by M. J. Tobias, 916
Peripheral Vascular Diseases: Diagnosis and Treatment. By William S. Collens, and Nathan D. Wilensky, 916
Symposium on the Synapse. By H. S. Gasser, Joseph Erlanger, D. W. Bronk, Rafael Lorente de Nó, and Alexander Forbes, 916
Traumi cranici: chirurgia—neurologia—radiologia. By Mario Lapidari, Ludovico Mucchi, and Virginio Porta, 917
Beiträge zum Verständnis der Leistungsfähigkeit des medizinischen Durchleuchtungsverfahrens. By Helge Christensen, 918
BRAIN, gliomatous tumors of, therapeutic influence by roentgen irradiation (abs), 798
tumors, effect of fractional roentgen irradiation on, 401
BREAST, cancer, pleural metastases from (abs), 784
carcinoma, advanced and recurrent, treatment of, 866
carcinoma, regression of, following artificial menopause, 108
fibrocystic disease of (abs), 153
inoperable cancer, effect of fractional roentgen irradiation on, 401
preoperative irradiation of, 98
BRONCHI, carcinoma, bronchographic examination, 370
major, clinical recognition of tuberculosis of (abs), 924
BRONCHIAL OBSTRUCTION, cause of failure of lung to expand following thoracotomy for empyema, 178
BRONCHIECTASIS, diagnosis by lipiodol bronchograms, 530
BRONCHOGRAMS, lipiodol, value of proper interpretation of, in thoracic surgery, 530
BRONCHOGRAPHY, examination of bronchogenic carcinoma by, 370
study by, of apparently healed lung abscesses (abs), 152
BRONCHOPNEUMONIA, suppurative, without abscess, 345
BULLETIN OF INTER-SOCIETY FOR RADIOLOGY, 132, 294, 454, 630, 768, 909

CALCIFICATION in abdominal neuroblastoma, 175
large intracerebral, probably of traumatic origin (abs), 921
of costal cartilages (abs), 922
of crystalline lens and vitreous (abs), 921
of vaginal sheath of testicle (abs), 788
CALCIFICATIONS, endocardial, study of, by roentgen kymography (abs), 150
mitral valve, roentgen differentiation of rheumatic from non-rheumatic, 704
CALCIFIED joint chondromatosis (abs), 794
lesions, nature of, special reference to those in spleen, 209
CALCINOSIS universalis (abs), 155
CALCIUM bile, diagnosis of (abs), 468

bile, roentgen picture of, and differential diagnostic evaluation (abs), 468
metabolism, abnormalities of (abs), 155
Calculi, cystine urinary, roentgen study, 537
Calculus, large bile, occlusion of duodenum by (abs), 788
unusual case of transparent intrauretero-pelvic, in ureteropyelography (abs), 932
Caldwell Lecture, 1939, 485
Cancer, etiological factors in some forms of, 110
inoperable, effect of fractional roentgen irradiation on several groups of, 401
of breast, pleural metastases from (abs), 784
relation of lymphatic vessels to spread of (abs), 158
Carcinoma, bronchogenic, bronchographic examination, 370
deep infiltrating, treatment of, by means of close irradiation (abs), 311
epidermoid, of skin, study of pathologically verified (abs), 795
genital, of female, osseous metastases in (abs), 469
of anus, incidence, pathology and radiation treatment, 265
of bladder, results of supervoltage roentgen therapy in, 586
of breast, advanced and recurrent, treatment of, 866
of breast, regression of, following artificial menopause, 108
of cervix uteri, advanced, with involvement of efferent urinary passages, fractional roentgen irradiation of (abs), 317
of cervix uteri, results of supervoltage roentgen therapy in, 586
of cervix uteri, significance of radiation reaction in (abs), 641
of cervix uteri treated by roentgen and radium radiation (abs), 799
of esophagus, radium therapy (abs), 479
of lip (abs), 307
of lip, evaluation of neck dissection in (abs), 799
of lip, radiation treatment (abs), 307
of lip, roentgen treatment (abs), 313
of lower lip, results of supervoltage roentgen therapy in, 586
of ovary, results of supervoltage roentgen therapy in, 586
of pancreas, 485
of prostate, bone metastases from, 732
of prostate, results of supervoltage roentgen therapy in, 586
of rectum, results of supervoltage roentgen therapy in, 586
of skin and lip, large protruding, treated by irradiation and surgery, 254
of skin, close roentgen irradiation of (abs), 797
of skin, roentgen treatment (abs), 313
of thyroid, results of supervoltage roentgen therapy in, 586
of tongue, results of supervoltage roentgen therapy in, 586
of tongue, treatment of glandular metastases in (abs), 477
of upper respiratory and food passages, results from protracted fractional roentgen irradiation of (abs), 315
of uterine cervix, individual radium treatment of (abs), 316
of uterus, results of supervoltage roentgen therapy in, 586
of uterus, results of treatment (abs), 318
of vallecula, therapy of (abs), 316
of vocal cords (abs), 478
prepyloric ulcer and (E), 288
primary, of lung, bone metastasis from (abs), 469
primary, of lung, early manifestations (abs), 153
primary, of lung, roentgen study of 206 proved cases, 357
renal cell, diffuse bone metastases from (abs), 156
results from irradiation of, in course of twenty-five years (abs), 475
results of treatment from 1927 to 1931 (abs), 475
squamous cell, of renal pelvis (abs), 155
urethral, radiation therapy (abs), 309
uterine, and ovarian function (abs), 481
Cardiac decompensation, roentgen therapy of thyroid gland in treatment of (abs), 314
Carpal navicular, fractures of, importance of special roentgenography (abs), 471
Case, James T., portrait opposite page 485
Cavities, healing of (abs), 153
Cell division, effect of roentgen rays on (abs), 322
Cerebellum, pneumo-encephalographic appearance of hemangioblastoma of, 1
Chamberlain, W. Edward, honored, 301
Chemical compounds, normally occurring intracellular, rôle played by, in growth and development, 444
Chemotherapy and roentgen therapy of pemphigus (abs), 642
Chicago Roentgen Society, 302
Childhood, tetanus and lesions of spine in (abs), 939
Children, duodenal ulcer in (abs), 785
problem of thymus in (abs), 923
subacute pneumonia in (abs), 924
Cholelithiasis, comparison of roentgenography and duodenal drainage in diagnosis of, 203
Cholesteatoma, roentgen diagnosis of (abs), 782
Chondromatosis, calcified joint (abs), 794
Christian's syndrome (abs), 934
roentgen therapy (abs), 934
Circulatory changes in bone, 90
Clavicle, idiopathic cysts of, in young subjects (abs), 936

CLAY-SHOVELER'S FRACTURE (abs), 936
CLEIDOCRANIAL DYSOSTOSIS, familial (abs), 794
COAL MINERS, anthracite, incidence of pulmonary and extrapulmonary tuberculosis in (abs), 926
COLON, passage of opaque medium into, under normal conditions (abs), 931
COMMISSION ON GRADUATE EDUCATION, summary of report of, 299
CONFERENCE OF EASTERN RADIOLOGISTS, 777
CONGENITAL absence of ramus of mandible (abs), 789
bowing and pseudarthrosis of lower leg associated with von Recklinghausen's neurofibromatosis (abs), 793
dislocation of hip joint, early diagnosis of, 37
dislocation, primary anterior, of hip (abs), 791
goiter, sporadic, causing death of an infant (abs), 785
CONVULSIVE STATES, fractures of spine in, 726
COOLEY'S DISEASE, study of familial character of (abs), 934
COR PULMONALE due to obstruction of pulmonary artery by syphilitic aortic aneurysms (abs), 151
CORACOCLAVICULAR JOINT (abs), 473
COSTAL CARTILAGES, calcification of (abs), 922
CRUCIATE LIGAMENT, anterior, ossification in (abs), 474
CRYSTALLINE LENS, calcification of (abs), 921
CYST, echinococcus, of left lobe of liver, 207
"CYSTIC" disease of lung, 848
CYSTINE urinary calculi, roentgen study of, 537
CYSTS, dermoid, of ovary (E), 905
idiopathic, of clavicle in young subjects (abs), 936
pancreatic, 485
Rathke's (abs), 149

DECOMPENSATION, cardiac, roentgen therapy of thyroid gland in treatment of (abs), 314
DENTAL MOLDS, application of, to radium therapy, 303
DEVELOPMENT of lower limbs, roentgen iconography of anomalies of (abs), 794
DEXTROPOSITION of arch of aorta (abs), 784
DISLOCATION, congenital, of hip joint, early diagnosis, 37
old, functioning false shoulder joint following (abs), 473
primary anterior congenital, of hip (abs), 791
DOSAGE, interstitial radium, expressed in roentgens, 276
DOSE, single roentgen-ray, effect of, on bone marrow of white mouse (abs), 323
Drosophila melanogaster Meig, experiments with rhythmical irradiation of eggs of (abs), 803
DRUG ADDICTS, structural changes in lungs of (abs), 925
DRUGS, effect of, on normal lung outline in roentgenograms (abs), 926
DUODENAL drainage, comparison of, with roentgenography in diagnosis of cholelithiasis, 203
DUODENUM, accessory pancreas of wall of, and its roentgen image (abs), 931
diagnostic errors in ulcerative lesions of, 48
foreign bodies in (abs), 929
function of, in some diseases of stomach (abs), 929
occlusion of, by large bile calculus (abs), 788
ulcer of distal end of first portion of, and extrabulbar duodenal ulcer (abs), 785
ulcer of, in children (abs), 785
DYSOSTOSIS MULTIPLEX (abs), 938
DYSPLASIA, polyostotic fibrous (abs), 938

ECHINOCOCCUS, calcified, of tail of pancreas (abs), 786
cyst of left lobe of liver, 207
cyst with detachment (abs), 926
EDITORIALS
Medical uses of radium, 123
Prepyloric ulcer and carcinoma, 288
Lateral pyelography, 289
Walter Wendell Fray, 1892–1940, 290
On to Boston, 450
The function of the vertebral veins and their rôle in the spread of metastases, 620
William A. Evans, 1876–1940, 623
James Wilson Hunter, Jr., 1878–1940, 626
The annual meeting, 763
Dermoid cysts of the ovary, 905
EFFECT, biological, of alpha rays in problems of weak radium therapy (abs), 318
biological, of ionizing radiations, some aspects of, 649
deleterious, of deep roentgen irradiation on lung structure and function, 235
general and indirect, of roentgen rays and importance in treatment of malignant tumors (abs), 801
general, of irradiation on organism (abs), 797
of experimentally formed tumors on musculoskeletal system of rat (abs), 320
of fractional roentgen irradiation on several groups of inoperable tumors, 401
of radiotherapy as recorded by serial color photography, 250
of roentgen irradiation on lymphatic transport of India ink, 756
of roentgen radiation on striated musculature when tolerance threshold of skin is exceeded, can it be demonstrated? (abs), 322
of roentgen rays on bone marrow in vivo and in in vitro (abs), 319
of roentgen rays on bones (abs), 319
of roentgen rays on cell division (abs), 322
of roentgen rays on Galliera sarcoma in vivo and in vitro (abs), 321
of short waves on renal function (abs), 643
of single roentgen dose on bone marrow of white mouse (abs), 323

of tangency and of principle of psycho-physical relativity (abs), 644
Elbow joint, detachment of medial epicondyle of humerus with displacement into (abs), 157
Emphysema, obstructive, roentgen evidence of, 325, 912
spontaneous interstitial, of lungs (abs), 152
Empyema, acute postpneumonic, causes of failure of lung expansion following thoracotomy for, 178
Epicondyle, medial, detachment of, of humerus, with displacement into elbow joint (abs), 157
Epihyal bone, 714
Epiphyseal coxa anteverta, internal-rotation-brace treatment of (abs), 792
Epiphysitis of os calcis (abs), 473
of spine (abs), 939
Epithelioma of skin, guiding principles for use of close irradiation in (abs), 477
squamous cell, of cervix with bone metastasis, 579
Epitheliomata of gums, radium therapy of (abs), 476
Epulis (abs), 150
Esophagus, carcinoma, radium therapy (abs), 479
pleural manifestations of perforation of (abs), 784
Etiological factors in some forms of cancer, 110
Evans, William A., 1876–1940, obituary (E), 623
portrait, 623
Examinations, selective service, 910
selective service, cost schedules for, 912
Exophthalmic goiter, how should it be treated at present time? (abs), 480
Exudates, basal, of subphrenic origin, 350
Eye, radium treatment of rodent ulcer near, 737
Eyeball, roentgenographic examination of anterior portion of, for foreign body, 778

Face, stratigraphy of sinuses of (abs), 783
Failla, G., portrait opposite page 649
Fatigue manifestations of scaphoid bone from chronic trauma (abs), 474
Fees, collection of, 909
Femur, fractures of neck of, importance of accurate roentgenography and interpretation in, treated by internal fixation (abs), 940
fractures of neck of, new device for facilitating taking of roentgenograms when performing extra-articular method of internal fixation in (abs), 483
nature of circumscribed areas of rarefaction in neck of, in Perthes' disease (abs), 472
pathology of ununited fractures of neck of (abs), 791
Fetus, aspiration of amniotic fluid by (abs), 644
Fibrocystic disease of breast (abs), 153
Fibrosarcoma, soft tissue, pathological features of (abs), 800
Filters, changeable, roentgen treatment of leukemia with (abs), 307
Fistula, ileovesical (abs), 931
Flajani-Basedow's disease; See: Exophthalmic goiter
Fluorescent screen with long residual luminosity, rapid control of roentgen times of exposure with (abs), 944
Fluorine poisoning, chronic, from roentgenological standpoint (abs), 935
Foreign bodies in duodenum (abs), 929
intraocular, localization of, with contact lens, 558
roentgen search for and localization, modern methods (abs), 804
roentgenographic examination of anterior portion of eyeball for, 778
Fracture, avulsion, of mastoid process (abs), 471
clay-shoveler's (abs), 936
Fractures, femoral-neck, importance of accurate roentgenography and interpretation in, treated by internal fixation (abs), 940
of carpal navicular, importance of special roentgenography (abs), 471
of femoral neck, new device for facilitating taking of roentgenograms when performing extra-articular method of internal fixation in (abs), 483
of femoral neck, simplified directional guide for hip nailing (abs), 472
of pelvis (abs), 158
of spine after metrazol convulsive therapy and other convulsive states, 726
of vault of skull, roentgen examination of (abs), 782
spontaneous subcapital of hip, occurring in tabes dorsalis (abs), 940
ununited, of neck of femur, pathology (abs), 791
Fragilitas ossium (abs), 155
Fray, Walter Wendell, 1892–1940, obituary (E), 290
portrait, 290
Frontal puncture for ventriculography (abs), 149

Gallbladder, diagnosis of "calcium bile" (abs), 468
roentgen picture of calcium bile and differential diagnostic evaluation (abs), 468
Galliera sarcoma, effect of roentgen rays on, in vivo and in vitro (abs), 321
irradiated in vivo and in vitro, experimental research on (abs), 802
Gallstone, intestinal obstruction due to, 634
large irregular, intestinal obstruction at terminal ileum caused by, 69
Gallstones, intestinal obstruction due to (abs), 154
Gamma radiation from radium, measurement of, in roentgens by free air ionization chamber, 428
radiation, measurement of, in roentgens, 889

Gastritis, hypertrophic, malignant course of (abs), 929
Gaucher's disease, chronic (abs), 935
Generator, compact, supervoltage, roentgen-ray, using pressure-insulated electrostatic high voltage source, 610
Genital carcinoma of female, osseous metastases of (abs), 469
Glandular metastases in carcinoma of tongue, treatment of (abs), 477
Gliomas, therapeutic influence of, by roentgen irradiation (abs), 798
Goiter, sporadic congenital, causing death of infant (abs), 785
Grenz rays, studies of sensitizing action of tar preparations on skin irradiated with (abs), 803
Growth, rôle played by normally occurring chemical compounds in growth and development, 444
Gums, epitheliomata of, radium therapy (abs), 476

Hand-Schüller-Christian's disease; See: Christian's syndrome
Heart, changes in size and shape of shadow of, in chronic pulmonary tuberculosis (abs), 927
roentgen kymographic evaluation of size and function of, 805
roentgen kymography of, clinical applications and limitations (abs), 466
valve areas, movements of roentgen-opaque deposits in (abs), 150
Hemangioblastoma of cerebellum, pneumo-encephalographic appearance of, 1
Hemangioma of joints (abs), 157
Hematoma, subdural, diagnosis and treatment (abs), 148
Hemorrhages, climacteric, new roentgen method in treatment of, with sparing of ovaries (abs), 308
Hepatosplenography with thorium dioxide, should it be completely abandoned? (abs), 467
Hip fractures, spontaneous subcapital, occurring in tabes dorsalis (abs), 940
joint, congenital dislocation, early diagnosis of, 37
joint of infant in first twelve months of life, roentgen study, 37
primary anterior congenital dislocation of (abs), 791
simplified directional guide for nailing of (abs), 472
Hospitals and radiologists, principles of relationship between, 423
Humerus, detachment of medial epicondyle of, with displacement into elbow joint (abs), 157
human, roentgen study of (abs), 937
thyroid tumor of, without demonstrable goiter (abs), 937
Hunter, James Wilson, Jr., 1878–1940, obituary (E), 626
portrait, 626
Hydromicrocephaly, syndrome of (abs), 921
Hyperostoses in relation with the meningiomas (abs), 149
Hyperthyreosis, results obtained from roentgen treatment of (abs), 159
Hypophysial duct, tumor of (abs), 149
Hypophysis, main indication for radiation treatment of (abs), 479

Iconography, roentgen, of anomalies of development of limbs (abs), 938
Ileitis, hyperplastic ulcerous regional (abs), 930
Ileovesical fistula (abs), 931
Ileum, terminal, intestinal obstruction at, caused by large irregular gallstone, 69
India ink, effect of roentgen irradiation on lymphatic transport of, 756
Indiana Roentgen Society, 302
Induration, plastic, of penis, radium therapy of (abs), 640
Infant, roentgen study of hip joint of, in first twelve months of life, 37
sporadic congenital goiter causing death of (abs), 785
Inflammation of middle lobe of lung, roentgen and clinical characteristics, 464
Inflammatory processes, acute, value and limitations of radium and roentgen treatment in (abs), 310
conditions, roentgen therapy for, 594
Institute of Radiology, 913
Intestinal obstruction at terminal ileum caused by large irregular gallstone, 69
obstruction due to gallstone, 634
obstruction due to gallstones (abs), 154
obstruction, treatment of, and procedure for identifying the lesion (abs), 154
Intestine, human small, intubation of (abs), 154
small, malignant tumors of (abs), 786
Intracellular chemical compounds, normally occurring, rôle played by, in growth and development, 444
Intracerebral calcification, large, probably of traumatic origin (abs), 921
Intraspinal causes of low back and sciatic pain (abs), 790
Invagination, roentgen images of gastro-gastroduodenal and duodeno-duodenal (abs), 786
Ionization chamber, free air, measurement in roentgens of gamma radiation from radium by, 428
Ionizing radiations, some aspects of biological action of, 649
Irradiation, close, guiding principles for use of, in epithelioma of skin (abs), 477
close, new results in malignant melanoma with (abs), 311

close, treatment of deep infiltrating carcinoma by (abs), 311
general effects of, on organism (abs), 797
of entire body in treatment of polycythemia (abs), 310
pendulum, with moving and fixed fields of incidence (abs), 943
preoperative, of breast, 98
results from, in carcinoma in course of twenty-five years (abs), 475
rhythmical, of eggs of *Drosophila melanogaster* Meig, experiments with (abs), 803
to produce sterilization (abs), 481
treatment of primary skeletal sarcoma by, 83
Janeway Lecture, 1939, 649
medal, presentation of, 664
Jejunum, stenotic tuberculosis of (abs), 930
Joint chondromatosis, calcified (abs), 794
Joints, hemangioma of (abs), 157
xanthomatous tumors of (abs), 790
Journal of National Cancer Institute, announcement of publication of, 301

Kidneys, acute suppuration, pulmonary complications of, 161
can intravenous urography be considered a test of function of? (abs), 932
effect of short waves on function of (abs), 643
late results of severe injury to (abs), 932
squamous cell carcinoma of pelvis of (abs), 155
study of motion of, in health and disease, 71
Kienböck's disease of lunate (abs), 472
Kymography as aid in differential diagnosis of mediastinal tumors (abs), 928
roentgen, evaluation of size and function of heart by, 805
roentgen, of heart, clinical applications and limitations (abs), 466
roentgen, study of endocardial calcifications by (abs), 150

Laminagraphy, practical applications of, 24
Larynx, body section roentgenography (planigraphy) of, 519
Leiomyosarcoma of fundus of stomach with perforation, 716
Leishmaniosis of skin treated with roentgen rays (abs), 476
Lens, contact, localization of intraocular foreign bodies with, 558
Leprosy, conquest of, 457
roentgenological observations in, 386
Leukemia, bone changes in, 31
roentgen treatment with changeable filters (abs), 307
Limbs, lower, roentgen iconography of anomalies of development of (abs), 794
roentgen iconography of anomalies of development of (abs), 938
Lip, carcinoma (abs), 307
carcinoma, evaluation of neck dissection in (abs), 799
carcinoma, radiation treatment (abs), 307
carcinoma, roentgen treatment (abs), 313
large protruding carcinoma of, treated by irradiation and surgery, 254
lower, carcinoma, results of supervoltage roentgen therapy in, 586
Lipiodol bronchograms, value of proper interpretation of, in thoracic surgery, 530
Lithiasis, pancreatic, 485
Liver, echinococcus cyst of left lobe of, 207
roentgen and anatomo-histological examination of parasites of (abs), 787
Localization of intraocular foreign bodies with contact lens, 558
of projectiles, modern roentgen methods (abs), 804
Lunate, Kienböck's disease of (abs), 472
Lung abscess and pseudo-abscess, 530
origin of tumors occurring in apex of, 838
Lungs, abnormally wide respiratory movement of lower structures of, 325, 912
abscesses, bronchographic study of apparently healed (abs), 152
basal exudates of subphrenic origin, 350
causes of failure of expansion of, following thoracotomy for acute postpneumonic empyema, 178
changes in roentgen image of outline of, from pharmacodynamic action (abs), 926
complications in, of acute renal and perirenal suppuration, 161
course of Besnier-Boeck's disease of, in serial roentgenograms, 564
"cystic" disease of, 848
deleterious effects of deep roentgen irradiation on structure and function of, 235
healing of cavities (abs), 153
inflammation of middle lobe of, roentgen and clinical characteristics (abs), 464
non-putrid suppuration of, roentgen aspects, 345
of drug addicts, structural changes in (abs), 925
primary carcinoma, bone metastasis from (abs), 469
primary carcinoma, early manifestations (abs), 153
primary carcinoma, roentgen study of 206 proved cases, 357
roentgen study of development of cavities of (abs), 783
spontaneous interstitial emphysema of (abs), 152
unusual course of metastases to, of sarcoma (abs), 465
Lymph nodes, retroperitoneal, their importance in cases of malignant tumors (abs), 159
Lymphadenopathy, giant follicular, radiation treatment of, 875

LYMPHATIC transport of India ink, effect of roentgen irradiation on, 756
vessels, relation of, to spread of cancer (abs), 158
LYMPHOGRANULOMA, radiotherapy of (abs), 643
venereum, osseous changes associated with (abs), 157

MALTA FEVER, bone and joint complications in (abs), 474
MANDIBLE, congenital absence of ramus of (abs), 789
MASTOID process, avulsion fracture of (abs), 471
MEASUREMENT in roentgens of gamma radiation from radium by free air ionization chamber, 428
of gamma radiation in roentgens, 889
MEDIASTINITIS, acute, roentgenological, pathological and clinical features and principles of operative treatment, 684
MEDIASTINUM, tumors of, kymography as aid in differential diagnosis (abs), 928
MEDICAL uses of radium (E), 123
MEDICINE and the press, 768
MEDITERRANEAN FEVER, study of familial character of (abs), 934
MELANOMA, malignant, new results with close irradiation of (abs), 311
MENINGIOMAS, hyperostoses in relation with (abs), 149
MENOPAUSE, artificial, regression of carcinoma of breast following, 108
new roentgen method used in hemorrhages of, with sparing of ovaries (abs), 308
METABOLISM, calcium, abnormalities of (abs), 155
METASTASES, bone, from carcinoma of prostate, 732
bone, from primary carcinoma of lung (abs), 469
bone, of sarcomata, roentgen study (abs), 469
bone, squamous cell epithelioma of cervix uteri with, 579
function of vertebral veins and their rôle in spread of (E), 620
glandular, in carcinoma of tongue, treatment of (abs), 477
in genital carcinoma of female (abs), 469
lung, of sarcoma, unusual course of (abs), 465
pleural, from cancer of breast (abs), 784
to sternum and second rib left from teratoma of right parotid gland, 887
METRAZOL convulsive therapy, fractures of spine after, 726
MINNESOTA RADIOLOGICAL SOCIETY, 141
MITRAL disease, roentgen appearance of enlarged left auricle in patients with, 834
valve calcifications, roentgen differentiation of rheumatic from non-rheumatic, 704
MUSCLE, striated, influence of roentgen radiation on, when tolerance threshold of skin is exceeded (abs), 322
MUSCULOSKELETAL system of rat, effect of experimentally formed tumors on (abs), 320
MYELOMA, multiple (abs), 796; (abs), 941
multiple, associated with nodular deposits of amyloid in muscles and joints and with Bence-Jones proteinuria (abs), 942
multiple, correlation of roentgen and blood examinations in, 858
MYOSITIS OSSIFICANS, progressive (abs), 794

NECK dissection, evaluation of, in carcinoma of lip (abs), 799
recent advances in roentgen examination of, 519
small accessory bones of, 714
NEPHROLITHIASIS occurring in recumbency (abs), 788
NERVOUS SYSTEMS, central and peripheral, radiosensitiveness of skin as dependent on (abs), 322
NEUROBLASTOMA, abdominal, calcification in, 175
NEUROFIBROMATOSIS, congenital bowing and pseudarthrosis of lower leg associated with (abs), 793
NEUTRONS in therapy (abs), 801
NEVI, vascular, radium treatment, 747
NEW YORK Academy of Medicine, 1940 graduate fortnight of, 299
Roentgen Society, 458
NOTOCHORD, persistence of, 719
NUCLEAR PHYSICS, action of (abs), 801
applied, conference on, 297

Obelia geniculata, use of, in study of rôle played by intracellular chemical compounds in growth and development, 444
OBSTETRICAL diagnosis, roentgen ray in, 568
OHIO RADIOLOGICAL SOCIETY, 302
ONION SKIN, use of, for radiobiological research (abs), 803
ORGANISM, general effects of irradiation on (abs), 797
OS CALCIS, epiphysitis of (abs), 473
OSSIFICATION centers, rate of appearance of, from birth to age of five years (abs), 789
in anterior cruciate ligament (abs), 474
OSTEITIS FIBROSA DISSEMINATA (abs), 156
OSTEOARTHROPATHIES, hypertrophying pneumonia (abs), 793
OSTEOCHONDROMA, unusual location of (abs), 789
OSTEOMALACIA, senile (abs), 156
OSTEOMAS, cranial, from roentgenologic viewpoint, 188
OSTEOMYELITIS, hematogenous pelvic, management of (abs), 793
primary pyogenic, of articular processes of vertebrae (abs), 470
syphilitic (abs), 943
OSTEOPETROSIS, 197
OVARIAN function, and uterine carcinoma (abs), 481
OVARIES, new roentgen method used in climacteric hemorrhages, with sparing of (abs), 308
OVARY, carcinoma, results of supervoltage roentgen therapy in, 586
dermoid cysts of (E), 905

Pachypleuritis, paradoxical roentgen image in pneumothorax a result of, 230
Pacific Roentgen Society, 302
Pain, low back and sciatic, intraspinal causes of (abs), 790
Pancreas, accessory, of wall of duodenum and its roentgen image (abs), 931
calcified echinococcus of tail of (abs), 786
carcinoma of, 485
cysts of, 485
gas abscess of, 485
radiation therapy of disease of, 485
roentgenology of disease of, 485
stones in, 485
Pancreatitis, acute and chronic, 485
Parasites of liver and spleen, roentgen and anatomo-histological examination of (abs), 787
Paralysis, progressive, roentgen treatment of (abs), 641
Parathyroid adenoma (abs), 156
Parathyroidism, 113
Parotid gland, benign vascular tumors of region of, treatment with radium moulage (abs), 314
teratoma of, with metastasis to sternum and second rib left, 887
Pelvimeter, roentgen, description of, 9
Pelvimetry, roentgen, discussion of, 9
Pelvis, fractures of (abs), 158
hematogenous osteomyelitis of, management of (abs), 793
renal, squamous cell carcinoma of (abs), 155
Pemphigus, roentgen therapy and chemotherapy of (abs), 642
Penis, plastic induration of, radiation treatment (abs), 483
radium therapy of plastic induration of (abs), 640
Pennsylvania Radiological Society, 141
Pentastoma in liver and spleen, anatomical and roentgen picture (abs), 787
Peptic ulcer, perforated, spontaneous pneumoperitoneum in, 853
Perforation of esophagus, pleural manifestations of (abs), 784
Perthes' disease, nature of circumscribed areas of rarefaction in neck of femur in (abs), 472
Pharmacodynamic action, changes in roentgen image of lung outline from (abs), 926
Photography, serial color, effects of radiotherapy as recorded by, 250
Physical characteristics of supervoltage roentgen rays, 615
Pittsburgh Roentgen Society, 302
Pituitary adenomata, follow-up study of surgical results in 338 cases (abs), 148
Planigraphy of larynx, 519
simple method of adopting conventional roentgenologic equipment to, 638
Plastic induration of penis, radiation treatment (abs), 483
of penis, radium therapy of (abs), 640
Plesioroentgenography, recent contribution to (abs), 483
Pleura, metastases to, from cancer of breast (abs), 784
Pleural manifestations of perforation of esophagus (abs), 784
Pneumoconiosis, barite, study of (abs), 464
Pneumo-encephalographic appearance of hemangioblastoma of cerebellum, 1
Pneumonia, atypical roentgen aspects, 333
subacute, in children (abs), 924
Pneumoperitoneum, spontaneous, in perforated peptic ulcer, 853
Pneumothorax, paradoxical roentgen image in, 230
spontaneous, associated with massive atelectasis (abs), 152
Polycythemia, roentgen treatment of (abs), 308
treatment of, by irradiation of entire body (abs), 310
Polyostotic fibrous dysplasia (abs), 938
case with unilateral involvement, 17
Pregnancy, diagnosis of, 568
Prepyloric ulcer and carcinoma (E), 288
Projectiles, roentgen search for and localization, modern methods (abs), 804
Prostate, carcinoma, bone metastases from, 732
carcinoma, results of supervoltage roentgen therapy in, 586
Protrusio acetabuli, investigation into nature of (abs), 158
Pseudofracture of tibia (abs), 470
Pubis, tuberculosis, roentgen pictures during course of (abs), 941
Pulmonary artery, cor pulmonale due to obstruction of, by syphilitic aortic aneurysms (abs), 151
Pyelography, lateral (E), 289
respiration, 71

Quimby, Edith H., honored, 140

Radiation, penetrating, physical differences between types of, 270
reaction, significance of, in carcinoma of cervix uteri (abs), 641
therapy, functional, of intermittent arteriosclerotic dysbasia (abs), 160
treatment of hypophysis, thyroid and suprarenals, main indication for treatment of (abs), 479
Radiations, ionizing, some aspects of biological action of, 649
200 kv. and 1,000 kv., comparison of skin reactions produced by, 601
Radiobiological experiments, use of onion skin for (abs), 803
Radiological Conference, Midsummer, in Rocky Mountains, 141
practice, present status of, 132

Society of New Jersey, 302
Society of North America, 141
RADIOLOGISTS and hospitals, principles of relationship between, 423
RADIOLOGY, debt of, to Thomsons and Thompsons, physicists and engineers, 409
graduate training in, 301
responsibility of, in diagnosis and treatment of thymic hyperplasia (abs), 922
RADIOTHERAPY, effects of, as recorded by serial color photography, 250
of lymphogranuloma (abs), 643
RADIUM bomb, design of a four gram, 117
control instruments, new, 457
dosage, interstitial, expressed in roentgens, 276
measurement in roentgens of gamma radiation from, by free air ionization chamber, 428
medical uses of (E), 123
moulage, treatment with, of benign vascular tumors of parotid region (abs), 314
therapy, application of dental molds to, 303
therapy of plastic induration of penis (abs), 640
therapy, value and limitations in acute inflammatory processes (abs), 310
therapy, weak, biological effect of alpha rays in problem of (abs), 318
treatment of rodent ulcer near eye, 737
treatment of vascular nevi, 747
RAMUS of mandible, congenital absence of (abs), 789
RATHKE'S cysts (abs), 149
RECTUM, carcinoma, results of supervoltage roentgen therapy in, 586
RECUMBENCY, nephrolithiasis occurring in (abs), 788
REMOGRAPHY (abs), 484
generator for flashes of roentgen light 1/1000 of a second in length for (abs), 484
RESEARCH and Standardization Committee of American Radium Society, report of, 909
RESPIRATION pyelography, 71
RESPIRATORY movement, abnormally wide, of lower lung structures, 325, 912
tract infection, epidemic of acute, roentgen aspects, 333
tract, upper, results of protracted fractional roentgen irradiation of carcinoma of (abs), 315
RHEUMATIC, roentgen differentiation from nonrheumatic mitral valve calcifications, 704
RHINOLITH, case of (abs), 922
RIB, second left, metastasis to, from teratoma of right parotid gland, 887
RICKETS, renal (abs), 155
RODENT ULCER near eye, radium treatment, 737
ROENTGEN anatomy of sulci and vessel channels of skull (abs), 782
anatomy of extrahepatic bile tracts (abs), 643
evidence of tuberculosis and cutaneous sensitivity to tuberculin, sequence of (abs), 784
examination, correlation of, with examination of blood in multiple myeloma, 858
examination of stomach, agar jelly in, 459
iconography of anomalies of development of limbs (abs), 938
iconography of anomalies of development of lower limbs (abs), 794
image, paradoxical, in pneumothorax, result of pachypleuritis, 230
irradiation, close, of skin carcinoma (abs), 797
irradiation, deep, deleterious effects of, on lung structure and function, 235
irradiation, effect of, on lymphatic transport of India ink, 756
irradiation, fractional, effect of, on several groups of inoperable tumors, 401
irradiation, fractional, of advanced carcinoma of cervix with involvement of urinary passage (abs), 317
irradiation, protracted fractional, results of, in carcinoma of upper respiratory and food passages (abs), 315
method, new, in treatment of climacteric hemorrhages with sparing of ovaries (abs), 308
-opaque deposits in heart valve areas, movements of (abs), 150
radiation, is it possible to demonstrate an influence of, on striated musculature when tolerance threshold has been exceeded? (abs), 322
-ray dose, single, effect of, on bone marrow of white mouse (abs), 323
-ray generator, compact, supervoltage, using pressure-insulated electrostatic high voltage source, 610
rays, action of, on bones (abs), 319
rays, combined action of, and sulfanilamide on *Staphylococcus aureus*, 115
rays, effect of, on bone marrow in vivo and in vitro (abs), 319
rays, effect of, on cell division (abs), 322
rays, effect of, on Galliera sarcoma in vivo and in vitro (abs), 321
rays, general and indirect effects of, and their importance in treatment of malignant tumors (abs), 801
rays in obstetrical diagnosis, 568
rays, supervoltage, physical characteristics of, 615
stimulation, study of (abs), 802
therapy and chemotherapy of pemphigus (abs), 642
therapy for inflammatory conditions, 594
therapy of hyperthyreosis, results obtained from (abs), 159
therapy of progressive paralysis (abs), 641
therapy of thyroid gland in treatment of cardiac decompensation (abs), 314
therapy, supervoltage, late results in, 586
therapy, value and limitations in acute inflammatory processes (abs), 310
times of exposure, rapid control of, with fluores-

cent screen with long residual luminosity (abs), 944
Roentgens, interstitial radium dosage expressed in, 276
measurement in, of gamma radiation from radium by free air ionization chamber, 428
measurement of gamma radiation in, 889
Roentgenograms, consecutive, adolescent development of sella turcica and frontal sinus based on, 665
new device to facilitate taking of, when performing extra-articular method of internal fixation in fractures of femoral neck (abs), 483
serial, course of Besnier-Boeck's disease of lungs in, 564
Roentgenography at very short distances, theoretical consideration and experience in (abs) 944
body section, of larynx, 519
body section, practical applications of, 24
body section, simple method of adopting conventional roentgenologic equipment to, 638
comparison of, with duodenal drainage in diagnosis of cholelithiasis, 203
importance of accurate, and interpretation in femoral-neck fractures treated by internal fixation (abs), 940
of sinuses, use of thorium dioxide in, 680
special, importance of, in fractures of carpal navicular (abs), 471
Roentgenologic aspects of epidemic of acute respiratory tract infection, 333
differentiation of rheumatic from non-rheumatic mitral valve calcifications, 704
equipment, conventional, simple method of adopting, to body section roentgenography, 638
Roentgenology of pancreatic disease, 485
specialization within, 645

Sarcoma, bone metastases of, roentgen study (abs), 469
experimental production of, by thorotrast (abs), 320
Galliera, effect of roentgen rays on, in vivo and in vitro (abs), 321
Galliera, irradiated in vivo and in vitro, experimental research on (abs), 802
of vagina, therapy of (abs), 482
polymorphous cell, radiation treatment of, 875
primary skeletal, treatment of, by irradiation, 83
unusual course of lung metastases of (abs), 465
Scaphoid bone, fatigue manifestations of, from chronic trauma (abs), 474
Scapula, osteochondroma on costal surface of (abs), 789
Sclerosis, multiple, roentgen therapy of (abs), 312
Sella turcica, adolescent development of, based on consecutive roentgenograms, 665
Seriography, generator for flashes of roentgen light 1/1000 of second in length for (abs), 484
Short waves, effect of, on renal function (abs), 643
Shoulder joint, functioning false, following old dislocation (abs), 473
unusual lesion of (abs), 937
Silicosis, prognosis in, 709
Sinus, frontal, adolescent development of, based on consecutive roentgenograms, 665
Sinuses of face, stratigraphy of (abs), 783
use of thorium dioxide in roentgenography of, 680
Skeleton, primary sarcoma of, treatment by irradiation, 83
Skin, carcinoma, close roentgen irradiation of (abs), 797
carcinoma, roentgen treatment (abs), 313
epidermoid carcinoma of, study of pathologically verified (abs), 795
epithelioma, guiding principles for use of close irradiation in (abs), 477
influence of roentgen radiation on striated musculature when threshold tolerance of, has been exceeded (abs), 322
large protruding carcinomas of, treated by irradiation and surgery, 254
leishmaniosis of, treated with roentgen rays (abs), 476
radiosensitiveness of, as dependent on central and peripheral nervous systems (abs), 322
reactions, comparison of, produced by 200 kv. and 1,000 kv. radiations, 601
studies of sensitizing action of tar preparations on, irradiated with ultraviolet and grenz rays (abs), 803
tuberculosis and sensitivity of, to tuberculin, sequence of roentgen evidence of (abs), 784
Skull, large intracerebral calcification probably of traumatic origin (abs), 921
osteomas of, from roentgenologic viewpoint, 188
roentgen anatomy of sulci and vessel channels of (abs), 782
roentgen examination in fractures of vault of (abs), 782
Soft tissue fibrosarcoma, pathological features of (abs), 800
Sosman, Merrill C., portrait opposite page 645
South Carolina X-Ray Society, 141
Specialization within roentgenology, 645
Spine, epiphysitis of (abs), 939
fractures of, after metrazol convulsive therapy and other convulsive states, 726
in acromegaly, 552
persistence of notochord, 719
tetanus and lesions of, in childhood (abs), 939
Spleen, nature of calcified lesions in, 209
roentgen and anatomo-histological examination of parasites of (abs), 787
Spondylolisthesis, etiology of (abs), 470

Spontaneous arteriovenous aneurysms of thorax (abs), 151
interstitial emphysema of lungs (abs), 152
pneumothorax associated with massive atelectasis (abs), 152
Staphylococcus aureus, combined action of roentgen rays and sulfanilamide on, 115
Sterilization by irradiation (abs), 481
Sternum, bifurcated and abnormally long xiphoid process of (abs), 465
metastasis to, from teratoma of right parotid gland, 887
Stomach, accessory, in right thorax (abs), 154
agar jelly in roentgen examination of, 459
diagnostic errors in ulcerative lesions of, 48
function of duodenum in some diseases of (abs), 929
inoperable cancer, effect of fractional roentgen irradiation on, 401
leiomyosarcoma of fundus of, with perforation, 716
tuberculosis of, roentgen study, 59
ulcer of greater curvature of, roentgen contribution to study of (abs), 928
Stratigraphy of sinuses of face (abs), 783
Subdural hematoma, diagnosis and treatment (abs), 148
Sulci of skull, roentgen anatomy of (abs), 782
Sulfanilamide, combined action of, and roentgen rays on *Staphylococcus aureus*, 115
Supervoltage roentgen-ray generator using pressure-insulated electrostatic high voltage source, 610
roentgen rays, physical characteristics of, 615
roentgen therapy, late results in, 586
Suppuration, acute renal and perirenal, pulmonary complications of, 161
non-putrid pulmonary, roentgen aspects, 345
Supraspinatus tendon, lesions of, and associated structures (abs), 157
Symmers' disease, radiation treatment of, 875
Synovioma, roentgen recognition of, 170
Syphilitic aortic aneurysms, cor pulmonale due to obstruction of pulmonary artery by (abs), 151
osteomyelitis (abs), 943

Tabes dorsalis, spontaneous subcapital hip fractures occurring in (abs), 940
Tangency, effect of, and of principle of psychophysical relativity (abs), 644
Tar preparations, studies of sensitizing action of, on skin irradiated with ultraviolet and grenz rays (abs), 803
Teratoma of right parotid gland with metastasis to sternum and second rib left, 887
Testicle, calcification of vaginal sheath of (abs), 788
Tetanus and lesions of spine in childhood (abs), 939
Tetany in an adult (abs), 156
Thompsons, physicists and engineers, debt of radiology to, 409
Thomsons, physicists and engineers, debt of radiology to, 409
Thoracotomy for acute postpneumonic empyema, causes of failure of lung expansion following, 178
Thorotrast, experimental sarcoma production by (abs), 320
Thorax, right, accessory stomach in (abs), 154
roentgenograms of, and intracutaneous tuberculin test for adults (abs), 925
spontaneous arteriovenous aneurysms of (abs), 151
value of proper interpretation of lipiodol bronchograms in surgery of, 530
Thorium dioxide, fixation of, in inflamed tissue (abs), 801
hepatosplenography with, should it be completely abandoned? (abs), 467
rate of removal of, from blood stream (abs), 320
use of, in roentgenography of sinuses, 680
Thrombi, mural, roentgen diagnosis (abs), 927
Thymus gland, problem of, in children (abs), 923
radiology's responsibility in diagnosis and treatment of hyperplasia of (abs), 922
Thyroid deficiency in twins (abs), 924
tumor of humerus without demonstrable goiter (abs), 937
Thyroid gland, carcinoma, results of supervoltage roentgen therapy in, 586
main indication for radiation treatment of (abs), 479
malignant lesions of (abs), 800
roentgen therapy of, in treatment of cardiac decompensation (abs), 314
Tibia, pseudofracture of (abs), 470
Tissue, inflamed, fixation of thorium dioxide in (abs), 801
Tongue, carcinoma, results of supervoltage roentgen therapy in, 586
carcinoma, treatment of glandular metastases in (abs), 477
Tracheobronchitis, acute, diagnosis of, 333
Trauma, chronic, fatigue manifestations of scaphoid bone from (abs), 474
Tuberculin, sequence of roentgen evidence of tuberlosis and cutaneous sensitivity to (abs), 784
test, intracutaneous, for adults, and roentgenograms of chest (abs), 925
Tuberculosis and cutaneous sensitivity to tuberculin, sequence of roentgen evidence of (abs), 784
chronic pulmonary, changes in size and shape of heart shadow in (abs), 927
gastric, roentgen study, 59
incidence of pulmonary and extrapulmonary, in anthracite coal miners (abs), 926
of major bronchi, clinical recognition of (abs), 924

of pubis, roentgen pictures during course of (abs), 941
stenotic, of jejunum (abs), 930
Tumor, benign giant cell, of bone, five year cure, 884
of hypophysial duct (abs), 149
thyroid, of humerus without demonstrable goiter (abs), 937
Tumors, benign vascular, of parotid region, treatment with radium moulage (abs), 314
cortical and medullary adrenal, modified air injection roentgen technique for demonstrating (abs), 933
effect of experimentally formed, on musculoskeletal system of rat (abs), 320
intrabronchial and intrathoracic, 530
malignant, general and indirect effects of roentgen rays and their importance in treatment of (abs), 801
malignant, importance of retroperitoneal lymph nodes in (abs), 159
malignant, of small intestine (abs), 786
malignant, of thyroid gland (abs), 800
mediastinal, kymography as aid in differential diagnosis of (abs), 928
occurring in apex of lung, origin of, 838
xanthomatous, of joints (abs), 790
Twins, thyroid deficiency in (abs), 924

Ulcer, duodenal, in children (abs), 785
of distal end of first portion of duodenum and extrabulbar duodenal ulcer (abs), 785
of greater curvature of stomach, roentgen contribution to study of (abs), 928
prepyloric and carcinoma (E), 288
Ulcerative lesions of stomach and duodenum, diagnostic errors in, 48
Ultraviolet rays, studies of sensitizing action of tar preparations on skin irradiated with (abs), 803
Undulant fever, vertebral lesions in (abs), 790
United States Navy, examination for appointment as commissioned officers in Medical Corps of, 140
Ureteropyelography, unusual case of transparent intrauretero-pelvic calculus in (abs), 932
Urethra, carcinoma, radiation therapy (abs), 309
Urinary calculi, cystine, roentgen study of, 537
Urography, intravenous, can it be considered a test of renal function? (abs), 932
Urologic and abdominal lesions, problems in differential diagnosis between (abs), 796
Uterus, carcinoma, and ovarian function (abs), 481
carcinoma, results of supervoltage roentgen therapy in, 586
carcinoma, results of treatment (abs), 318
cervix, advanced carcinoma, with involvement of efferent urinary passages, fractional roentgen irradiation (abs), 317
cervix, carcinoma, individual radium treatment of (abs), 316
cervix, carcinoma, results of supervoltage roentgen therapy in, 586
cervix, carcinoma, significance of radiation reaction in (abs), 641
cervix, carcinoma, treated by roentgen and radium radiation (abs), 799
cervix, squamous cell epithelioma, with bone metastasis, 579

Vagina, sarcoma, therapy of (abs), 482
Vaginal sheath of testicle, calcification of (abs), 788
Vallecula, carcinoma, therapy of (abs), 316
Vegetative nervous system, irradiation of, in intermittent arteriosclerotic dysbasia (abs), 160
Veins, vertebral, function of, and their rôle in spread of metastases (E), 620
Ventriculography, frontal puncture for (abs), 149
Vertebrae, lesions of, in undulant fever (abs), 790
primary pyogenic osteomyelitis of articular processes of (abs), 470
Vertebral veins, function of, and their rôle in spread of metastases (E), 620
Virginia Radiological Society, 457
Vitreous, calcification of (abs), 921
Vocal cords, carcinoma of (abs), 478

Xanthomatosis, 396; (abs), 934
Xanthomata of joints (abs), 790
Xiphoid process of sternum, bifurcated and abnormally long (abs), 465

AUTHOR INDEX TO VOLUME 44

Abbott, W. Osler, 154
Abele, Adolf, 803
Ackermann, Alfred J., 59
Adams, W. E., 152
Agati, Dino, 936
Albright, Fuller, 775
Anderson, Bert G., 150
Anderson, Margaret, 789
Andreesen, Remmer, 474
Anspach, William E., 794
Anzilotti, A., 476, 929, 930, 932
Archer, Vincent W., 108
Armstrong, Eugene L., 151

Baccaglini, M., 928
Bacon, Ralph D., 71
Bade, Heinz, 319, 322, 801
Bailey, Frank R., 113
Barany, Elma, 579
Barber, C. Glenn, 793
Barbieri, Arrigo, 466, 787
Barnard, Leonard, 155
Barr, Joseph S., 774
Barth, E. E., 644
Batt, Richard C., 940
Batts, Martin, 470
Bauer, Walter, 775
Bean, William B., 152
Becker, R. F., 644
Belanger, George, 771
Belli, M., 464
Benassi, Enrico, 467, 788
Bennett, George E., 157
Bennett, Granville A., 775
Berg, J., 468
Bering, Fr., 641
Berk, Louis H., 927
Bertelotti, L., 802
Bianchini, A., 480
Bignami, Carlo, 795
Bignami, Giuseppe, 785, 786, 787, 794
Bishop, W. A., Jr., 790
Blackett, C. W., 774
Blades, Brian, 530
Bode, H. G., 477
Bolker, Herman, 98
Bonomini, Bruno, 784
Bracher, George J., 197
Bradford, F. Keith, 790
Broders, Albert C., 800
Bronk, Detlev W., 916
Brown, Percy, 409
Brunetti, Lodovico, 644
Brunschwig, Alexander, 83, 89
Buisson, M., 932
Burman, Michael, S., 37
Businco, Ottavio, 474

Cahal, Mac F., 296, 771, 912
Calchi-Novati, G., 643
Campbell, Lloyd A., 250, 263, 264
Cantarow, Abraham, 938
Cardillo, Furio, 944
Carty, John R., 248
Casati, Annibale, 783
Case, James T., 485
Caulk, Ralph M., 772
Cave, Edwin French, 472
Chamberlain, W. Edward, 638, 771
Chandler, Fremont A., 90
Chaoul, H., 311
Charr, Robert, 709
Charteris, Alexander A., 737
Chester, Edward M., 552
Chester, William, 552
Chodoff, Richard J., 154
Christensen, Helge, 918
Christophe, Kenneth, 473
Cignolini, Pietro, 484, 934
Clark, H. Chandler, 37
Cleaves, Edwin N., 937
Cloud, R. W., 610, 615
Cobey, Milton C., 157
Cockerell, T. D. A., 457
Codecà, Giovanni, 941
Coggin, Charles B., 151
Cohen, Abraham G., 924
Cohen, Archibald C., 926
Cole, George C., 925
Cole, Lewis Gregory, 772
Cole, William Gregory, 772
Coleman, Mark, 156
Collens, William S., 916
Collier, D. R., 386
Colosimo, Cesare, 465, 929
Compton, Arthur H., 270, 286
Cooke, Robert A., 680
Cooper, George, Jr., 108
Cope, Oliver, 933
Corrigan, K. E., 776
Cottenot, P., 635
Cova, Pier Luigi, 643
Crawford, J. Hamilton, 466
Crego, C. H., Jr., 791
Cushing, Harvey, 914

Daigger, A., 315
Dall'Acqua, V., 464
Dandy, Walter E., 148
Davenport, C. B., 665
Davenport, Lowry F., 772
Davidoff, Leo M., 1
Davis, Kenneth S., 144
Delherm, L., 636
Dell, J. M., Jr., 776
Derbyshire, A., 776
De Santo, Dominic A., 790
Desjardins, Arthur U., 126, 159, 594
Deutschmann, W., 637
Dick, Vernon S., 161
Dickson, Frank D., 937
Dietrich, Harry F., 939
Diveley, Rex L., 937
Dobelle, Martin, 789
Dörr, H., 469, 475
Dowell, D. Arnold, 776
Dresser, Richard, 776
Dulin, J. W., 154
Dyke, Cornelius G., 1, 771

Edeiken, Louis, 884
Ehrlich, William, 149
Eley, Clayton W., 626
Engelstad, Rolf Bull, 307
Epifanio, Giuseppe, 801
Epstein, Bernard S., 704
Erba, Lino, 922
Erdélyi, Josef, 159
Erlanger, Joseph, 916
Escudero, Lucilo, 152
Evans, William A., Jr., 714

Failla, G., 649, 889
Farber, Sidney, 776
Fariñas, P. L., 370, 773
Farrell, John T., Jr., 709
Fellowes, O. N., 115
Ferciot, C. Fred, 472
Ferris, Henry W., 942
Fisher, J. W., 772
Flocks, Rubin, 115
Flynn, James M., 69
Focht, Elizabeth F., 776
Forbes, Alexander, 916
Franklin, R. Maxwell, 152
Freedman, Eugene, 48
Fricke, Robert E., 263, 269
Fried, Carl, 401
Friedell, H. L., 805
Frisch, Ernst, 160
Fugazzola, Franco, 929

Gaini, Giuseppe, 476
Gal, Felix, 481, 482
Gallavresi, Luigi, 784
Gauss, C. J., 481
Garden, Robert S., 474
Garland, L. H., 805
Garvin, Curtis F., 151
Gasser, Herbert S., 916
Ghormley, Ralph K., 796
Gilardoni, Arturo, 484, 944

Gillespie, James B., 938
Gilmer, William P., 459
Gilmour, John, 158
Giordano, Giovanni, 643, 926
Glauner, R., 315
Goecke, H., 318
Goehring, Harrison D., 48
Goldberg, Benjamin, 207
Golden, Ross, 325, 773, 913
Gomez, Gonzalo Esguerra, 145
Goodman, B. A., 153
Gradoyevitch, Borivoye, 473
Gray, J. H., 158
Greene, Jesse J., 158
Gregori, Angelo, 319
Greineder, K., 311
Grier, G. W., 772
Gross, Sidney W., 149
Grove, R. Clark, 680
Guarini, Carlo, 934
Gubner, Richard, 466
Guidotti, Carlo, 931
Günsel, Eberhard, 943
Guthmann, H., 475

Hall, E. Walter, 623
Hall, R. D. McKellar, 936
Hall, Wendell C., 838
Ham, Donald P., 777
Hamann, Anna, 276
Hamblen, E. C., 143
Hamby, Wallace B., 636
Hampton, Aubrey O., 940
Hare, Hugh F., 775, 776
Hargrave, Robert, 800
Harrington, H. L., 320
Hasley, Clyde K., 922
Hayden, Henrietta, 776
Healy, T. R., 774
Heeren, J. G., 468
Heim de Balsac, R., 635, 834
Helwig, Ferdinand C., 937
Henderson, S. G., 772
Henderson, W. R., 148
Hendrickson, Herman S., 151
Herčik, Ferd., 803
Heupke, W., 145
Higgins, Charles C., 155
Hill, J. M., 772
Hintze, Arthur, 475
Hirsch, Edwin F., 383
Hochberg, Lew A., 153, 178
Hodges, Fred J., 866
Hodges, Fred M., 630
Hoerr, Stanley O., 795
Holinger, Paul, 384
Horvath, Joseph, 313
Horwitz, M. Thomas, 157
Horwitz, Thomas, 938
Hosen, H., 924
Howes, William E., 98, 106
Huber, Herbert, 308
Huepel, Robert C., 794
Hufford, C. E., 774
Huggins, Charles, 320
Hunt, Howard B., 254
Hunt, Luke W., 925

Inouye, K., 318
Irsik, Josef, 159

Jacobsen, Victor C., 235
Jacox, Harold W., 113
Jaffe, Henry L., 641, 799
James, H. H., 104

Kaplan, Ira I., 265, 636
Karshner, Rolla G., 939
Kazanjian, V. H., 789
Kellogg, Douglas S., 396
Kelly, James F., 776
Kernohan, James W., 149
Kerr, H. Dabney, 88, 115
Keys, Ancel, 805, 833
King, Don, 940
King, Donald S., 772
King, J. B., 922
King, Jennings M., 113
Kirchhoff, Heinz, 317
Kirklin, B. R., 357, 423, 774
Kirmse, T. W., 924
Kirshbaum, J. D., 716
Kliegel, Hubert, 477
Klusáková, M., 803
Knierer, W., 483
Knies, Phillip T., 230
Koehler, Hans, 803
Körbler, Juraj, 479
Kornblum, Karl, 333, 775
v. Kovesligethy, Ivan, 309
Kowarschik, J., 145
Krause, George R., 719
Kretschmer, Herman L., 796
Kühnau, J., 145
Küntscher, Gerhard, 319
Kuhlmann, F., 145
Kuhns, John G., 939
Kulowski, J., 793
Kunkel, Paul A., 148

Lampert, H., 145
Langendorff, H., 323
Lapidari, Mario, 917
Laquerrière, A., 636
Laubry, Ch., 635
Lauro, Armando, 937
Leader, Leonard O., 207
Lederer, Max, 153
Leef, Edward, 940
Leigh, Octa C., 773
Lenz, Maurice, 105
Leucutia, T., 586
Levene, George, 771
Levine, Milton I., 784
Levinson, Louis J., 303
Levyn, Lester, 203
Lewis, Raymond W., 170
Lincoln, E. M., 924
Lipschutz, Benjamin, 154
Livingston, S. K., 887
Loepp, W., 472
Logan, Myra, 157
Lorente de Nó, Rafael, 916
Love, J. Grafton, 149
Lovotti, S., 932
Lowry, Tom, 154
Lura, Antonio, 927
Luther, Wolfgang, 322

McAneny, John B., 747
McCarroll, H. R., 791
McClelland, J. E., 921
McGuire, Johnson, 152
Maderna, Candido, 642
Madrazo, M. F., 805
Margolies, Alexander, 150
Marinelli, L. D., 889
Marks, Joseph H., 732, 777
Marquis, W. James, 858
Martin, Charles L., 106, 263
Martinet, René, 785
Marzocchi, Gualtiero, 931
Mass, Max, 716
Massari, Gian Maria, 931
Master, Arthur M., 144
Mayoral, A., 943
Medinger, Frederick G., 786
Meigs, Joe V., 641, 799
Meisels, Emil, 564
Meland, Orville N., 105
Mendl, Karl, 31
Meyer, A., 928
Meyerding, Henry W., 800
Meyers, Frank, 203
Michael, Paul, 155
Milch, Henry, 792
Mitchell, A. Graeme, 923
Miyamoto, Sigeyuki, 320
Moehlig, Robert C., 17
Moller, P. F., 935
Moore, Sherwood, 24
Moorman, Lewis J., 154
Morrison, Harvey R., 537
Mucchi, Ludovico, 785, 917
Müller, Walther, 472
Murphy, John T., 774
Muscettola, Guiseppe, 932
Myers, Dan W., 530

Nathan, Louis, 939

Nathanson, Ira T., 799
Neil, R. H., 117
Nesbit, Reid M., 161
Neuhof, Harold, 684
Neumann, Werner, 311
Newell, Edward T., Jr., 307
Nicotra, Antonino, 934
Nuzzo, Luciano, 930

O'Brien, Frederick W., 105
Oberdoerffer, M. J., 386
Olds, John W., 357
Orndoff, Benjamin H., 600
Orsenigo, Serafino L., 788
Ostrum, Herman W., 726
Oughterson, A. W., 105

Pagani, A., 313
Pagel, W., 153
Paleari, Antonio, 921
Papperitz, W., 323
Parsons, Phillip B., 175
Pearson, Manuel M., 726
Peck, Nathan, 303
Peck, Willis S., 866
Peirce, Carleton B., 848
Pellegrini, G., 314
Pemberton, John de J., 800
Perkins, Charles W., 773
Perlman, H. H., 935
Perona, Pietro, 144
Peterson, F. R., 154
Peterson, Leonard T., 483
Peukert, Lothar, 803
Pfeifer, Walter, 477
Pfeiffer, Raymond L., 558
Phemister, Dallas B., 791
Picchio, Carlo, 794
Piccolo, Giacinto, 801
Pierson, Edward L., 777
Platt, Louis, 175
Pohle, Ernst A., 747
Pollock, George A., 796
Pomerantz, Leo, 320
Ponzio, Mario, 310
Porta, Virginio, 917
Portmann, U. V., 874
Possati, Alberto, 307
Pulvertaft, R. Guy, 788

Quigley, Daniel T., 110
Quimby, Edith H., 105, 776

Rabin, Coleman B., 684
Ransom, Henry K., 866
Ratti, Arduino, 465, 469
Reding, R., 797
Reeves, Robert J., 772
Reichenmiller, Hans, 316
Reimann, Hobart A., 333
Reimann, Stanley P., 444
Renfroe, Olive, 665
Reynolds, L., 383, 776
Rhinehart, Barton A., 635
Richards, Gordon E., 776
Rigler, Leo G., 634, 805
Roberts, Sumner M., 470
Robinson, J. Maurice, 601
Robinson, Walter W., 774
Rocchini, G., 643
Roesler, Hugo, 773
Rothberg, Abraham S., 471
Routier, D., 635, 834
Rouvière, H., 916
Rowbotham, G. F., 149
Rubenfeld, Sidney, 265, 636, 875
Rüsken, Wilhelm, 798
Runco, Antonio, 794, 938
Ryerson, Edwin W., 96

Sala, Angelo M., 579
Santagati, Francesco, 782
Sante, L. R., 350
Saxl, Otto, 31
Schaefer, W., 308
Schatzki, Richard, 773, 933
Schenck, Samuel George, 568
Schinz, Hans R., 478
Schittenhelm, A., 479
Schlesinger, M. J., 773
Schreiber, Frederic, 17
Schulte, G., 145
Schulz, M. D., 644
Schwartz, Charles Wadsworth, 188
Scott, Wendell G., 832
Scupham, George W., 851
Secomandi, Giov. Maria, 787
Severance, Alvin O., 641
Shehadi, William H., 470
Shelden, C. Hunter, 149
Siciliano, L., 308
Siegel, Mortimer L., 151
Siegling, John A., 938
Simmonds, F. A. H., 153
Simon, Harold E., 473
Simon, O., 310
Simonetti, C., 921
Singer, George, 428
Skinner, E. H., 664, 755
Sloat, J. L., 483
Smerchinich, Giovanni, 800
Smith, C. H., 924
Smith, David H., 158
Smith, E. J. Radley, 157
Smith, Wilbur A., 466
Snell, Dorothy, 789
Snow, William, 777
Sokoloff, Martin J., 709
Solis-Cohen, Leon, 785
Sontag, L. W., 789
Sosman, Merrill C., 645, 771
Spedini, F., 464
Spurling, R. Glen, 790
Steel, David, 592
Stein, Justin J., 469
Steinbach, Meyer, 785
Stenstrom, K. Wilhelm, 284
Stewart, Steele F., 939
Stone, Robert S., 601
Sugarbaker, Everett D., 756
Sugiura, Kanematsu, 756
Sussman, Marcy L., 345
Sutro, Charles J., 320
Sweany, Henry C., 209
Swenson, Paul C., 773

Taft, Robert B., 777
Talbott, John H., 775
Tarr, Leonard, 942
Tartagli, Dino, 782
Taylor, Fletcher B., 155
Taylor, Grantley W., 799
Taylor, Lauriston S., 428
Tempini, Giambattista, 643
Terwilliger, C. K., 940
Teufel, S., 315
Thaxter, Langdon T., 853
Thomas, Merthyn A., 778
Thomason, H. A., 943
Thoms, Herbert, 9
Toniolo, G., 321
Trivelli, Luciano, 793
Trump, J. G., 610, 615
Trump, John, 776
Tschetter, David, 83
Turano, Luigi, 483

Ulrich, Helmuth, 941
Ungerleider, Harry E., 466

Valdini, P. L., 464
Valenti, Alessandro, 786
Van de Graaff, R. J., 610
Vidgoff, Ben, 197
Vitale, Emanuele, 783
Vogt, Edward C., 470, 771
Vonessen, A., 640

Wallace, William S., 772
Wallfield, Mark J., 784
Warkany, Josef, 923
Warner, A. H., 117
Warren, Shields, 641, 775, 795
Warren, Stafford L., 291
Weber, Harry M., 774
Wehr, W. H., 105
Wendlberger, J., 797
Wessely, Emil, 316
Wessler, H., 924

White, T. N., 889
von Wieser, W., 312
Wilensky, Nathan D., 916
Williamson, Bryn, 473
Wilson, Philip D., 790
Wilson, Stanley A., 777
Windle, W. F., 644
Wirth, John E., 263
Wörner, Eduard, 471
Wolferth, Charles C., 150
Wright, Louis T., 157
Wyatt, George M., 771, 776
Young, Barton R., 519, 638, 772

Zaffiro, Edoardo, 804
Zeman, F., 803
Zubiani, Giulio, 926